

Occurrence and Biology of Maize Shoot Fly in India

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Maggots of four different species of flies injuring maize seedlings during spring and autumn 1970-72, were observed in the Punjab. The most common and the principal species was identified as *Atherigona naqvii* Steyskal (Muscidae: Diptera). Earlier it has been recorded as pest of wheat (Steyskal 1966) and barley (Srivastava *et al.* 1969). This is the first record of *A. naqvii* infesting maize.

Preliminary biology was studied by rearing the fly in the laboratory on maize during February-April 1972. The white, minute (0.72×0.16 mm) rice grain shaped eggs, sculptured with horizontal longitudinal ridges, were laid singly or in small batches on the stem above the ground or just below ground level, and also on the undersurface of cotyledonary or first leaf of young seedlings. The eggs hatched in 1-3 days. The larva fed on leaf surface in the funnel primarily as "whorl maggot". Irregular slits and deformed leaves were formed as a result of attack. Dead-heart also appeared in a few cases. Seedlings that grew fast recovered from the damage to some extent. But in most of the severely attacked plants tillering was initiated at an early stage. Due to pushing out of the central leaves the larva did not reach maturity, and it appeared that mortality occurred during this process. The maggots were reared on fresh tender stems and changing the food as and when it was necessary. The total larval period recorded was 15-18 days, while the pupal stage lasted for 8-9 days. Adult flies survived for 1-2 weeks on yeast-glucose (dry) food.

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References

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- Steyskal, G. C. (1966). A new species of *Atherigona rondani* (Diptera: Muscidae) causing damage to wheat in West Pakistan. *Proc. Ent. Soc. Washington*, 68: 53-56.

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CALAMOTROPHA PALUDELLA (HUBNER) IN SURREY. — In reply to Mr. Bretherton's query about this moth (*Ent. Rec.*, 87: 254), I recorded one here on the same night — 17th-18th July. Previously the trap had produced two in 1967, curiously enough on the same date. — R. FAIRCLOUGH, Blencathra, Deanoak Lane, Leigh, Reigate, Surrey.